

Fig. 1

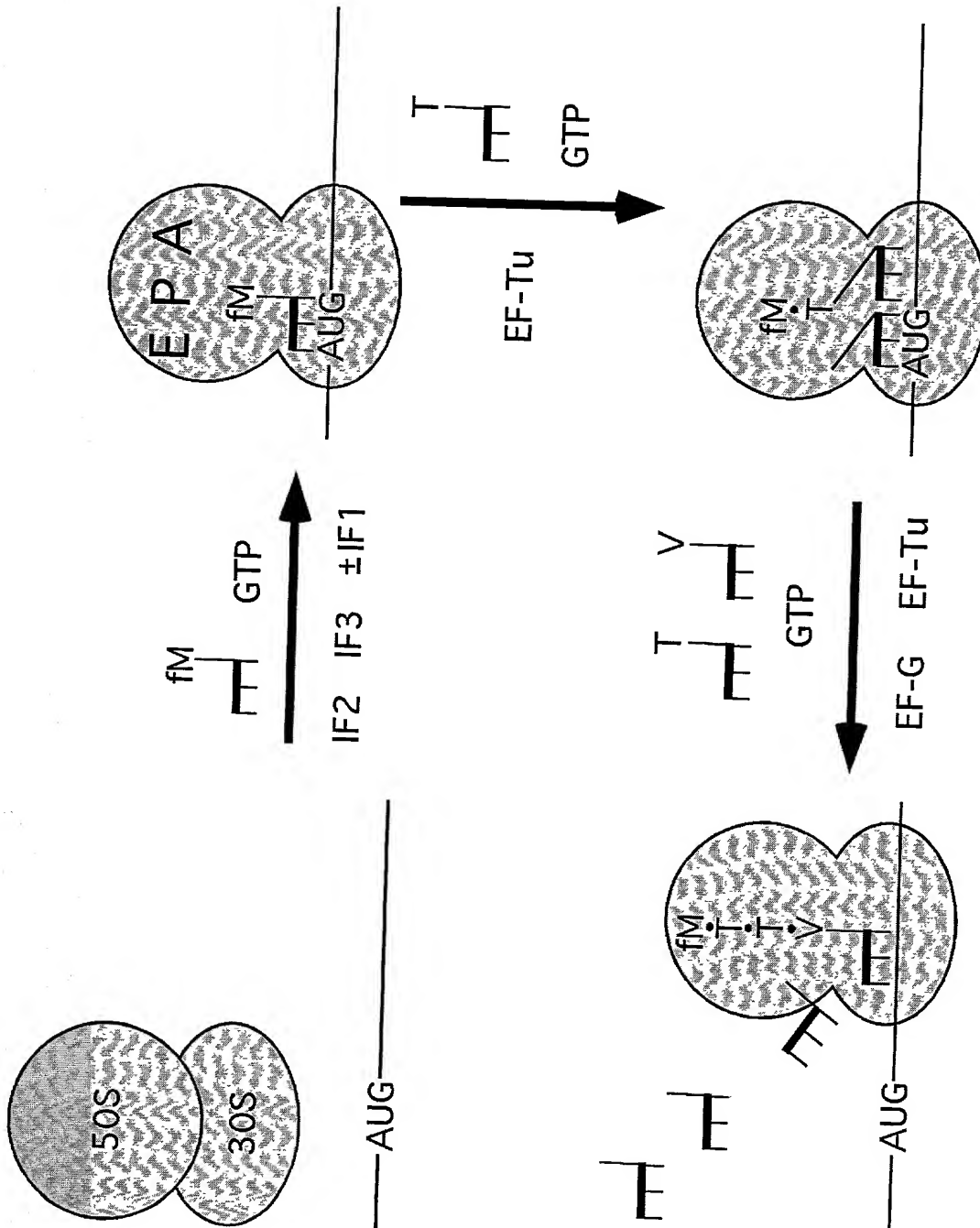


Fig. 2

205210" EB/500T

17 RNA pol. promoter

5' TAATACGACTCACTATAG 3'

|||||

3' ATTATGCTGAGTGATATCCCAATTGAAATCATTCTCCATTTTTT

mRNA MTTV
5' pppGGGUAAACUUUAGUAAAGGAGGUAAAAAA AUG ACC GUU GAA UUC C 3'
epsilon S-D FM T T V

mRNA MTV
5' pppGGGUAAACUUUAGUAAAGGAGGUAAAAAA AUG ACC GUU GAA UUC C 3'
FM T V

mRNA MV
5' pppGGGUAAACUUUAGUAAAGGAGGUAAAAAA AUG GUU GAA UUC C 3'
FM V

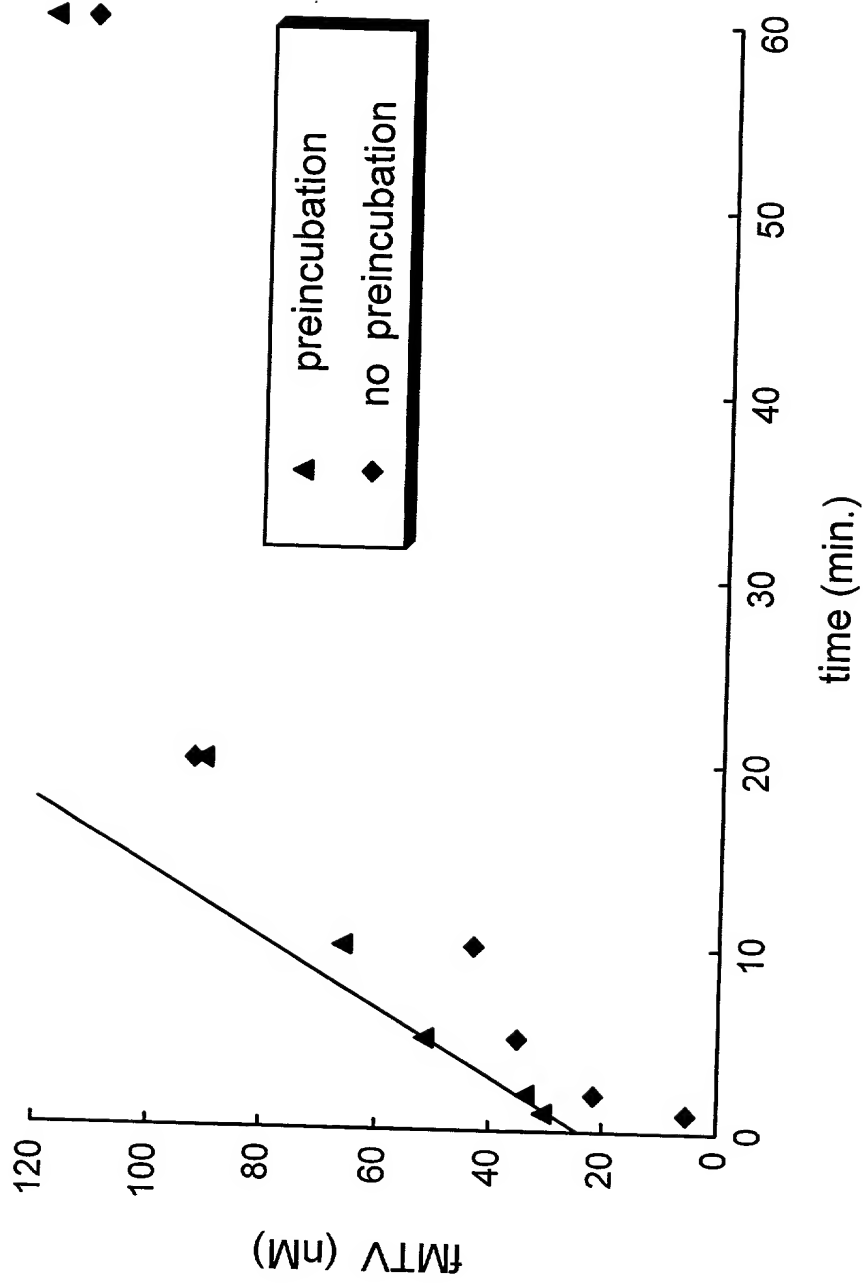
mRNA MVT
5' pppGGGUAAACUUUAGUAAAGGAGGUAAAAACAC AUG GUU ACC GAA UUC C 3'
FM V T

mRNA scramble-epsiMVT
5' pppGGGUAAUUAUACUUAAGGAGGUAAAAACAC AUG GUU ACC GAA UUC C 3'
FM V T

mRNA ΔepsiMVT
5' pppGG-----GUAAGGAGGUAAAAACAC AUG GUU ACC GAA UUC C 3'
FM V T

mRNA MTKV
5' pppGGGUAAACUUUAGUAAAGGAGGUAAAAACAC AUG ACC AAA GUU GAA UU 3'
FM T bK V

Fig. 3

**Fig. 4**

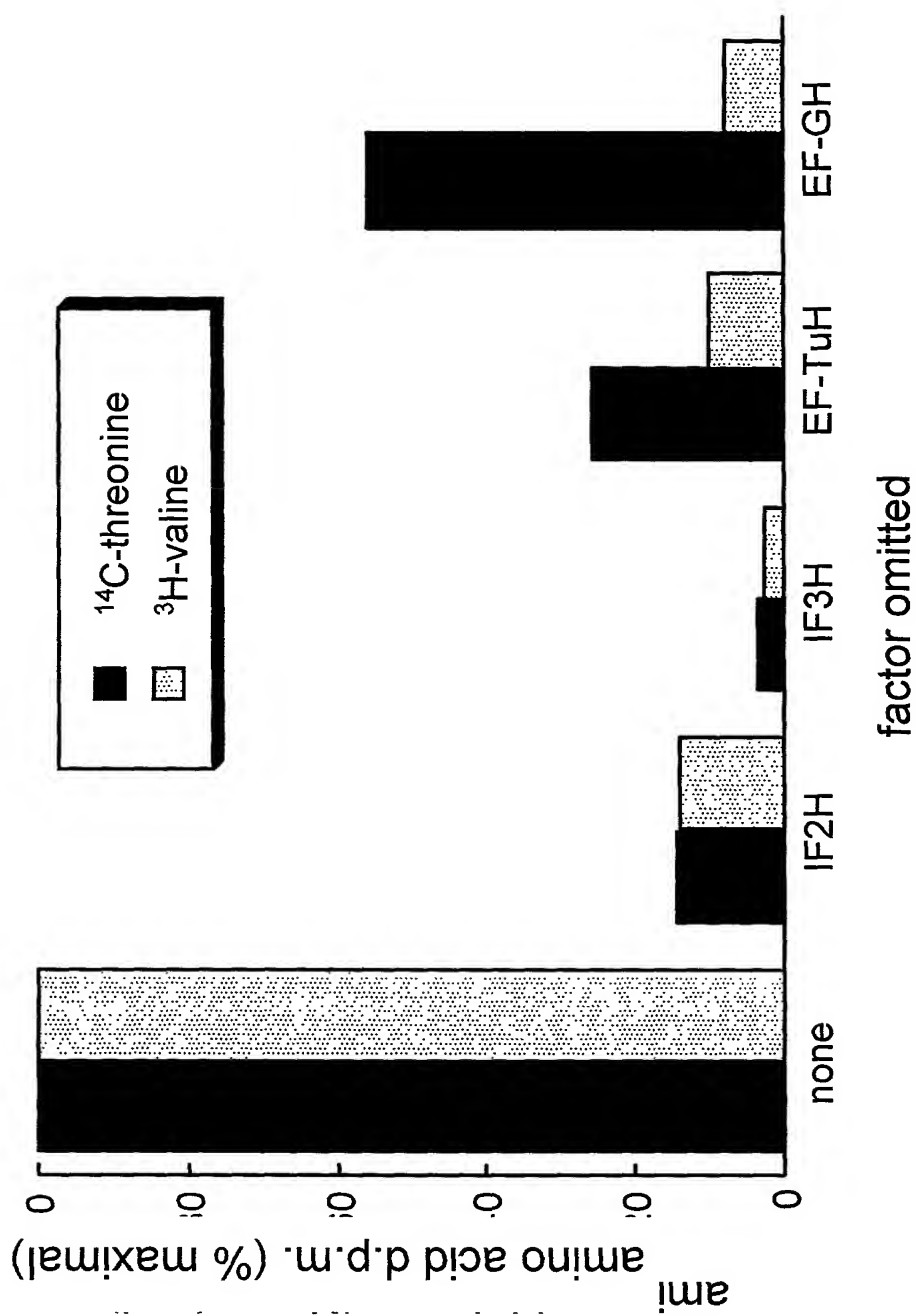


Fig. 5

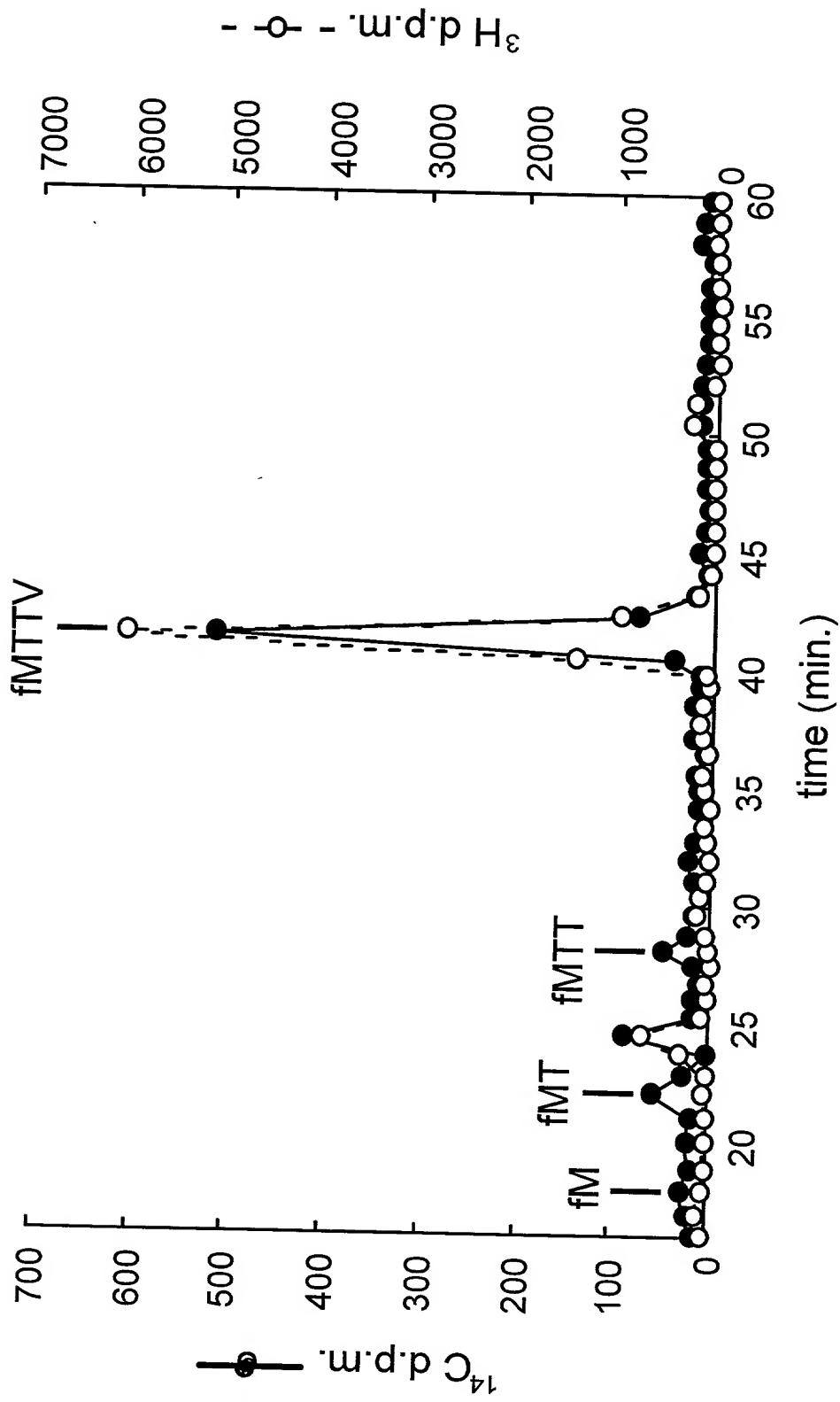


Fig. 6

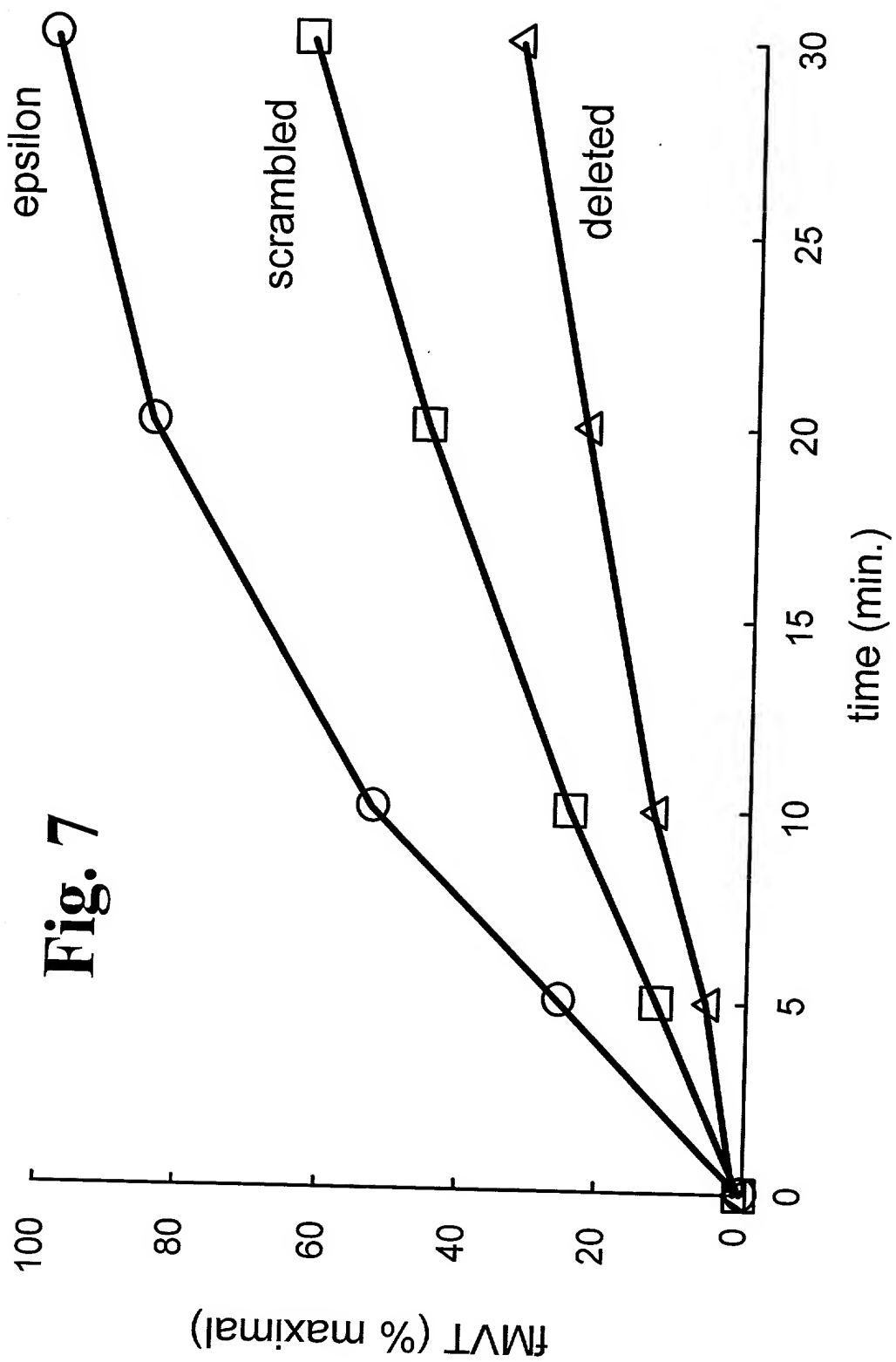
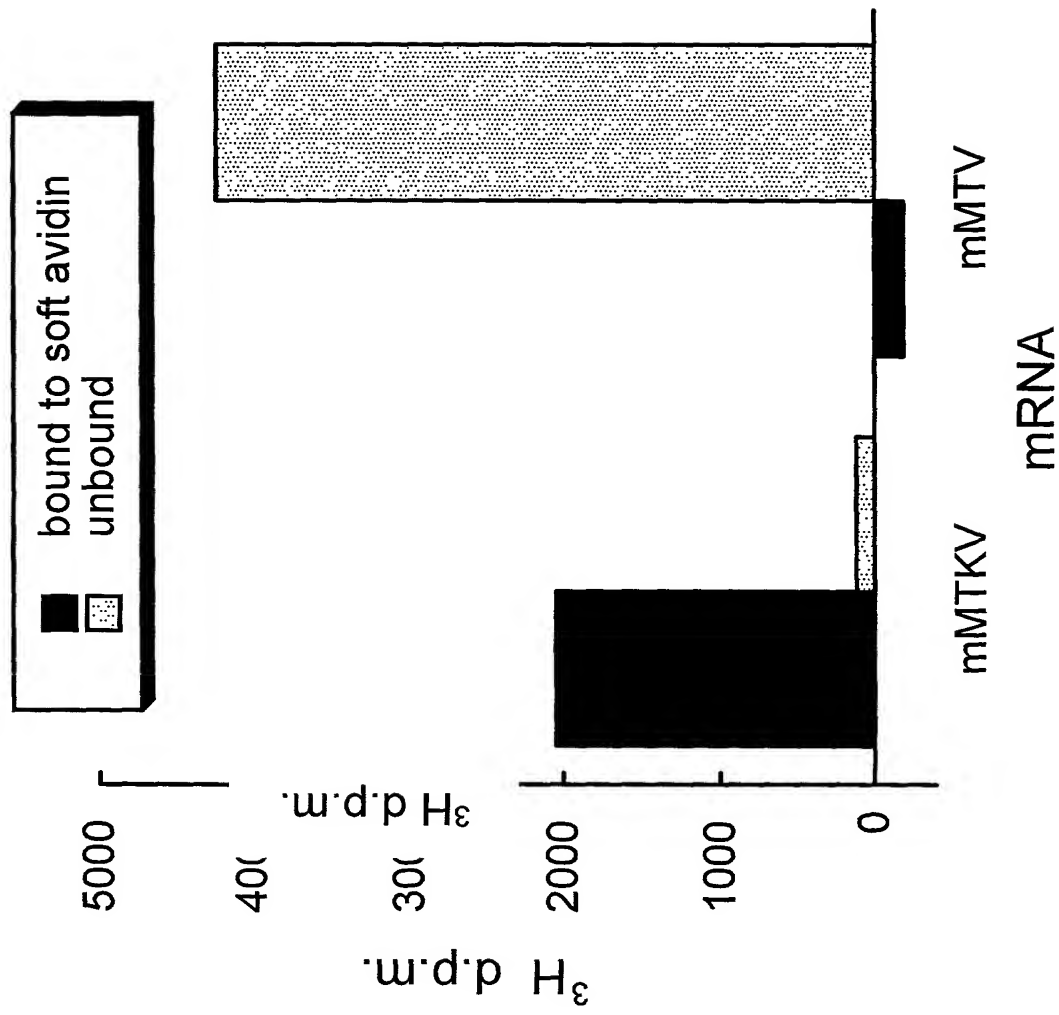
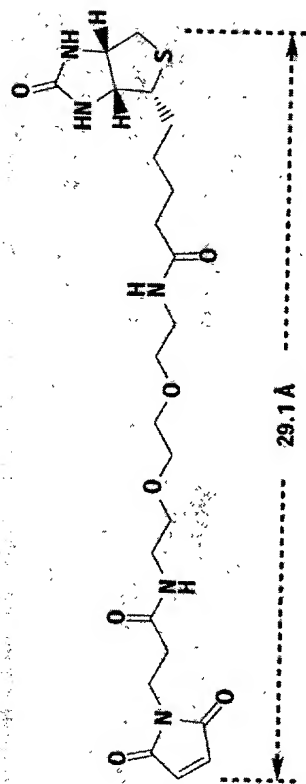


Fig. 8





Biotin-PEO-maleimide

Cys-S⁻ →

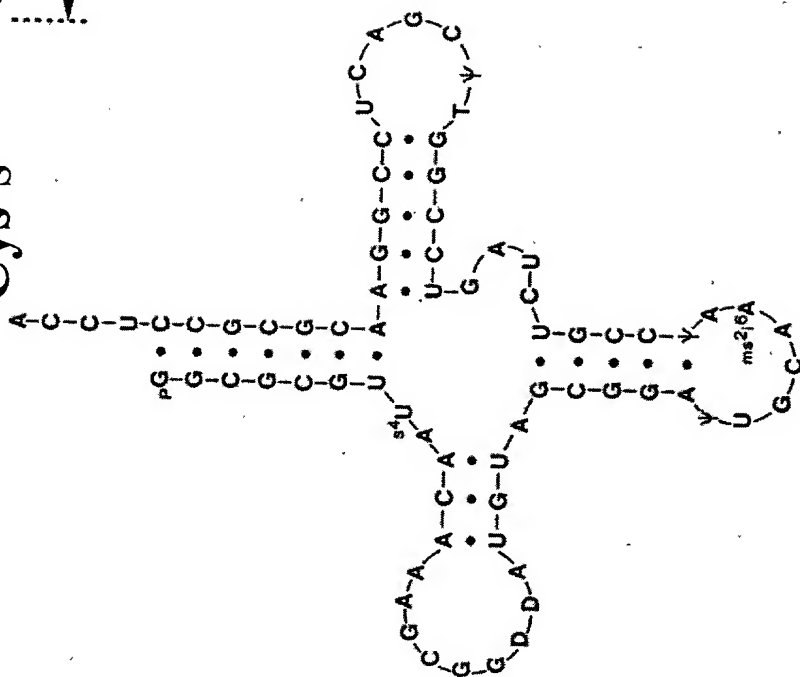


Fig. 9

205210" E842500F

tRNA^{Cys}

Cys-tRNA^{Cys}

Biotinyl ⁿ pH 6.0		Biotinyl ⁿ pH 6.9		Biotinyl ⁿ pH 6.0		Biotinyl ⁿ pH 6.9	
—	—	—	—	—	—	—	—
[- pH 8.8]		[- pH 8.8]		[- pH 8.8]		[- pH 8.8]	

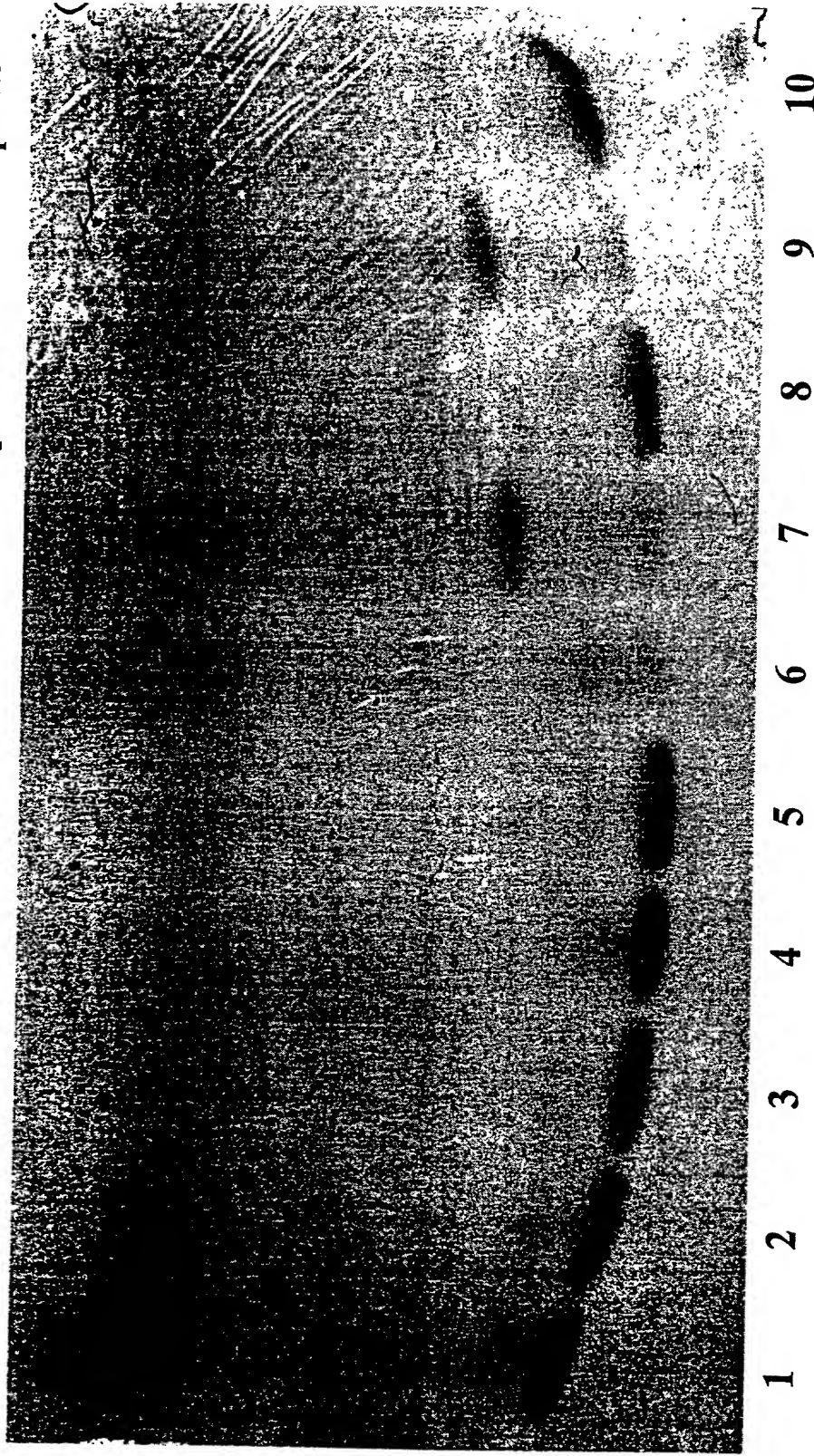
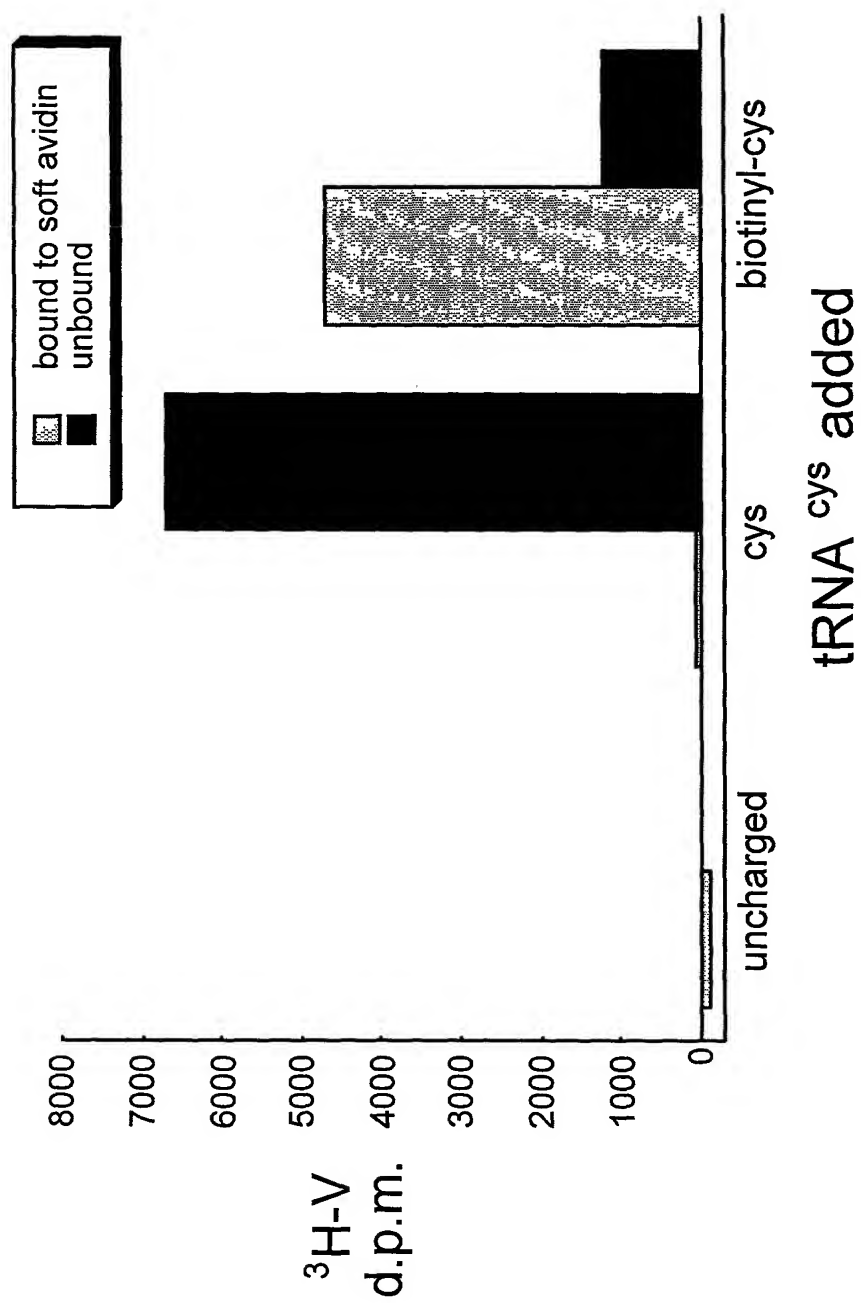


Fig. 10

Fig. 11

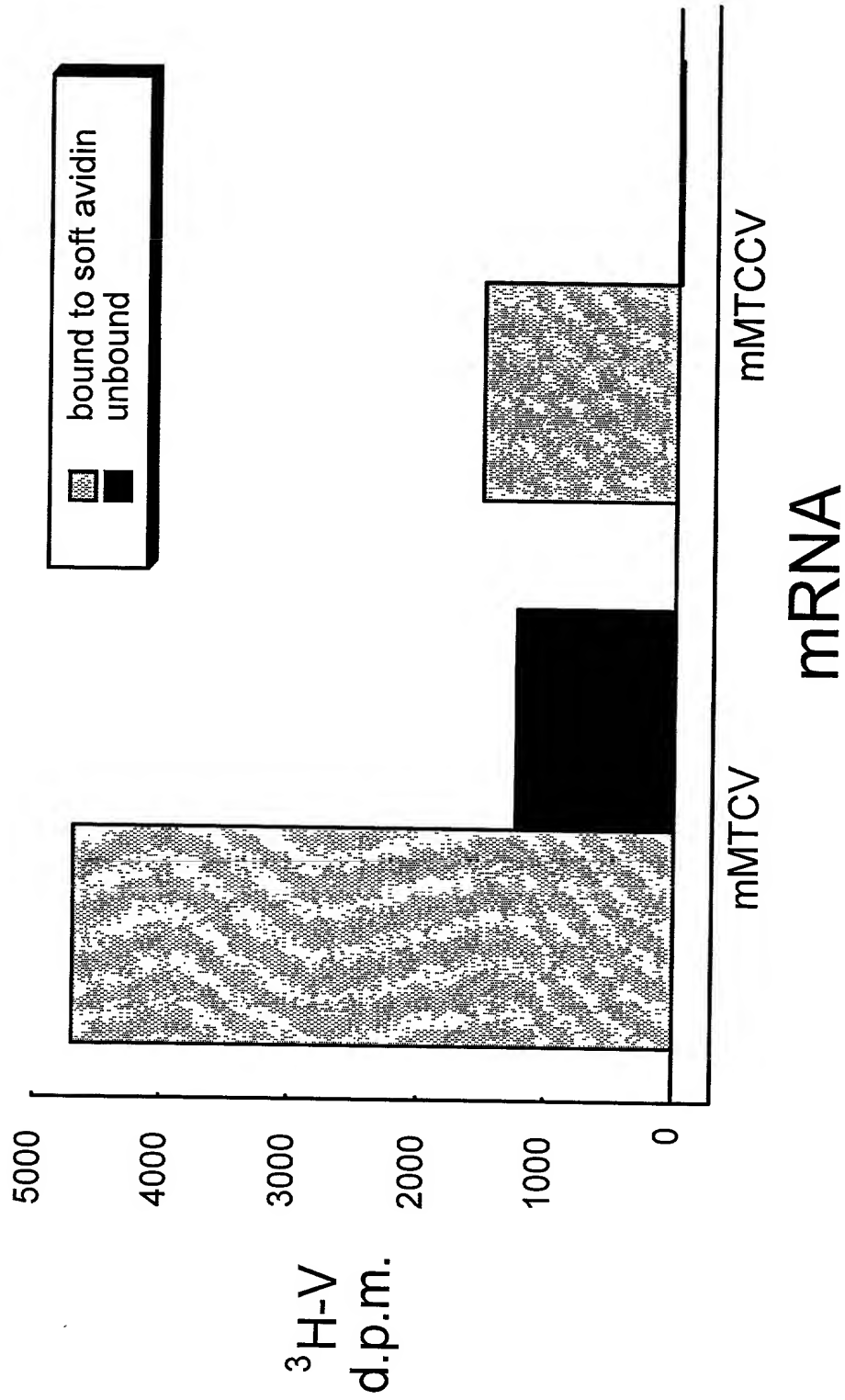
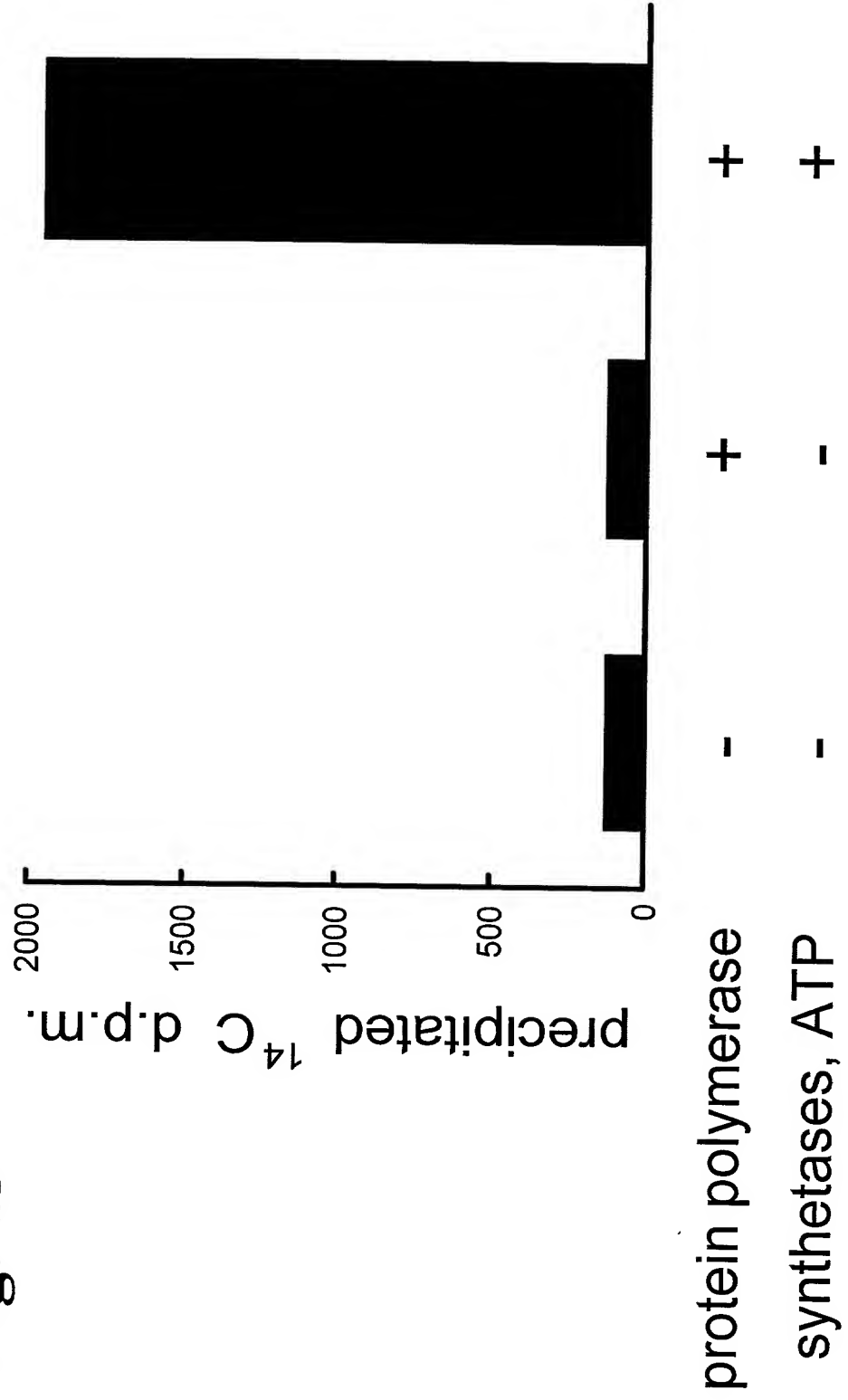
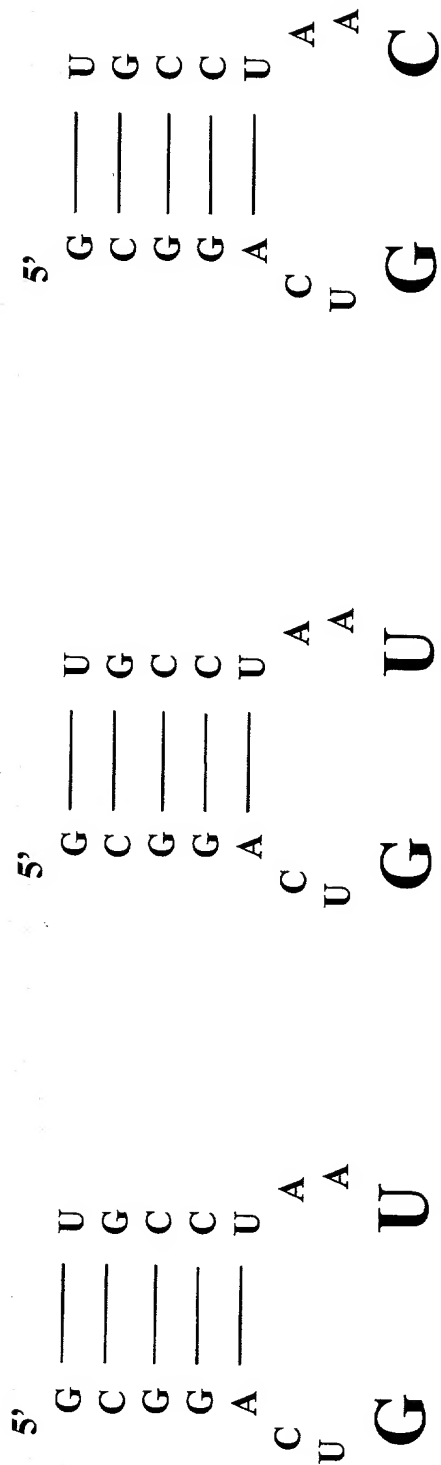


Fig. 12

Fig. 13





G

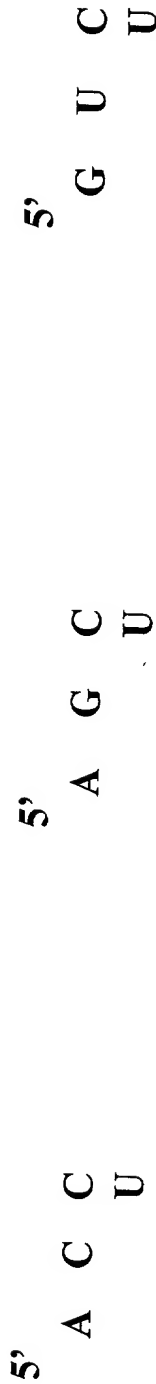
for

C

for

A

for



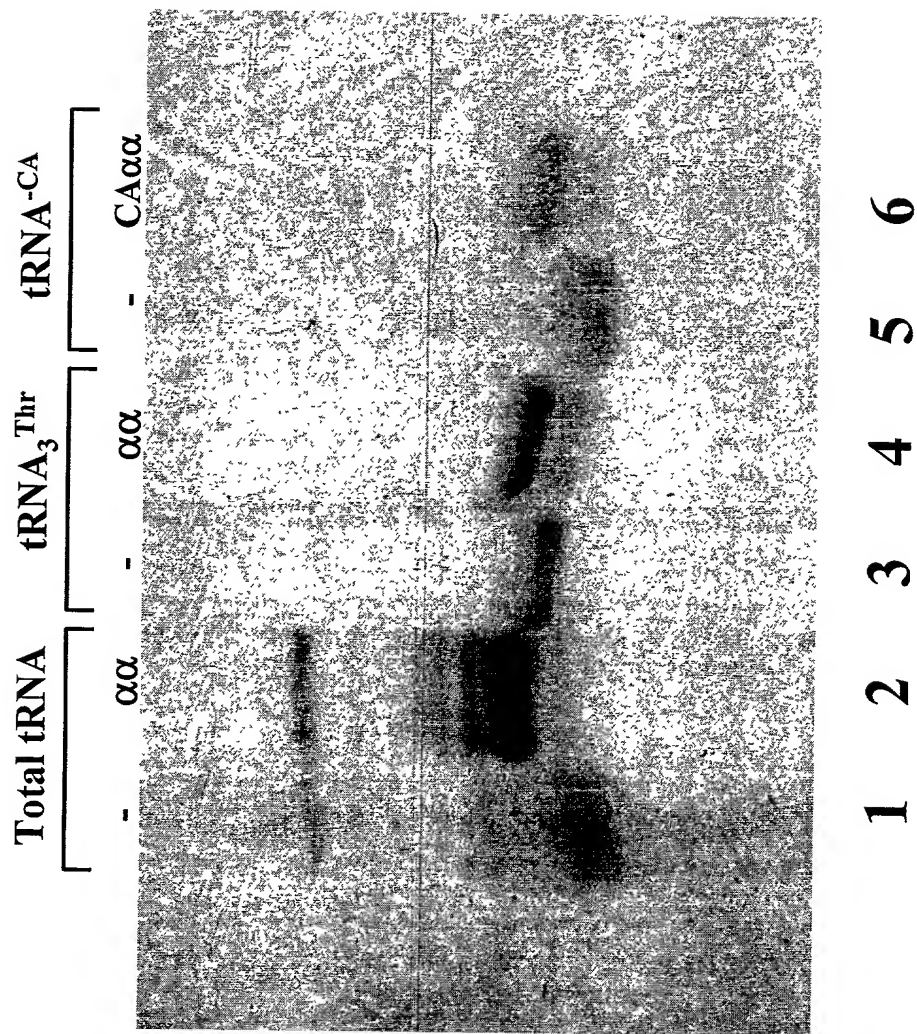
Unnatural amino acid 1
(was T)

Unnatural amino acid 2
(was S)

Unnatural amino acid 3
(was V)

Fig. 15

Fig. 16



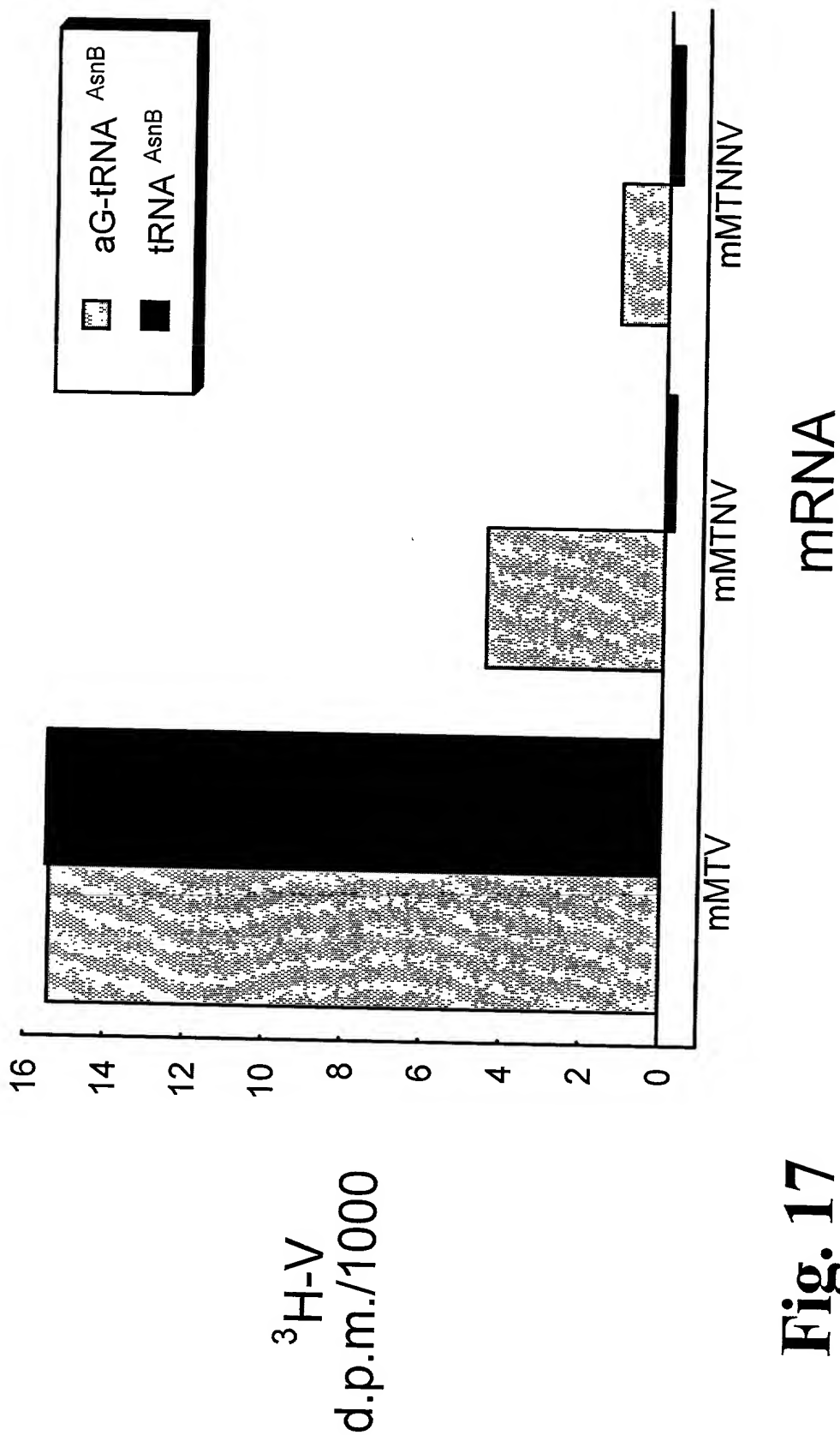


Fig. 17

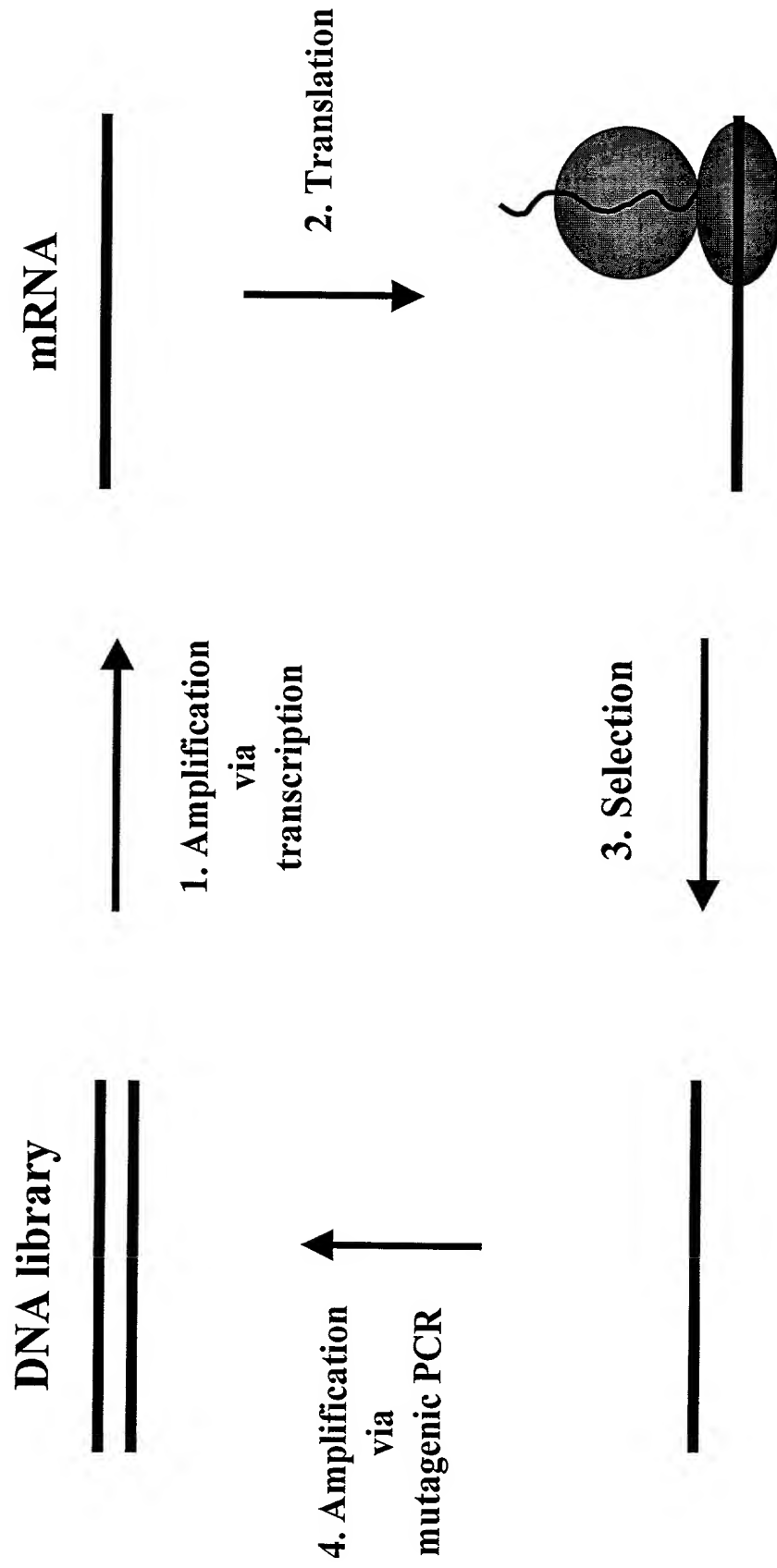


Fig. 18

5' ppGGGUAAGUUUAGUACGAAGGUAAACAAGUG (GUUA CCGGAGACUGUAGUCUACCGUAACCGUAGAGUAGUUAACUACCGUUGG) "AATD 3'

AM V T V T V V V V T T T T V V T T V V

fM(V,T)_n peptide products

13-Mar
MUTVWTVTV

21-mer
AMTWTWTTTWTTTW

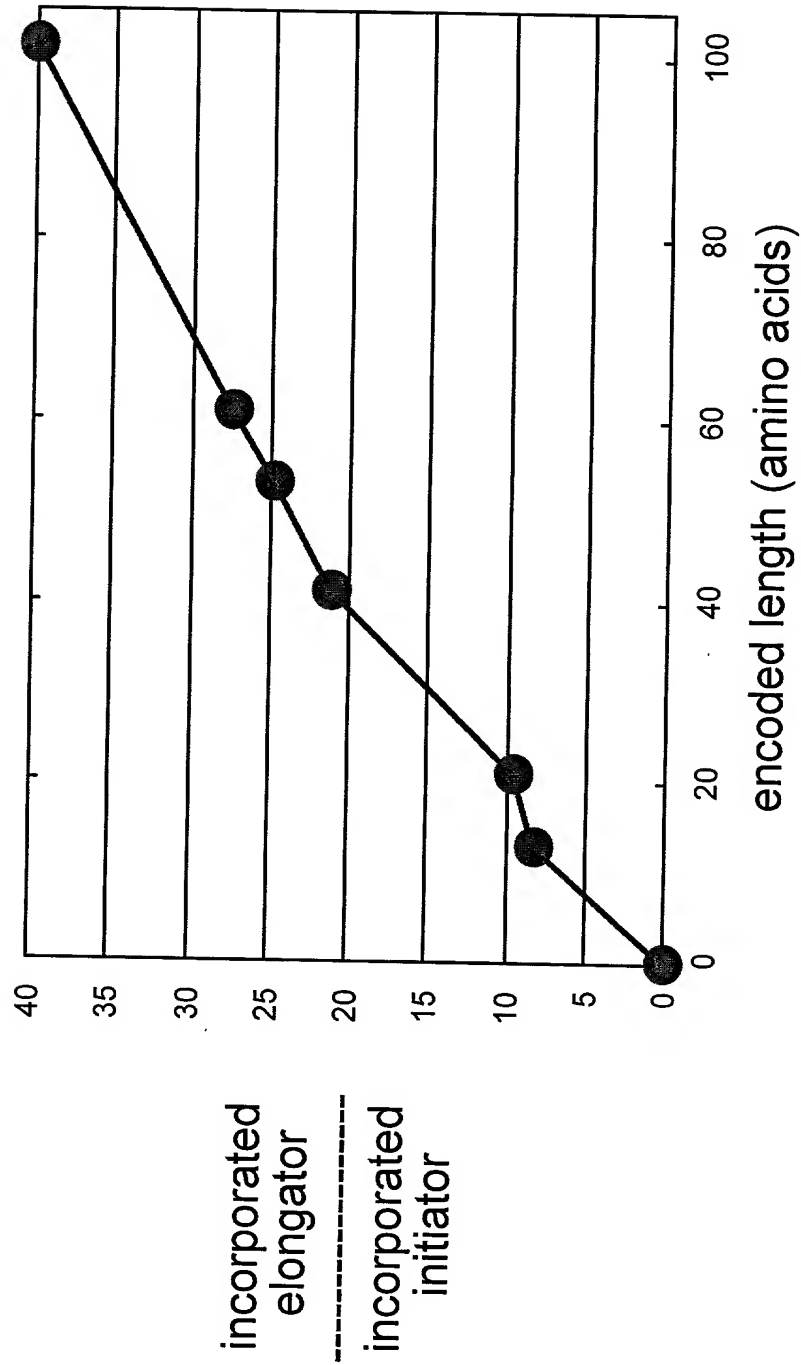
41 -1222

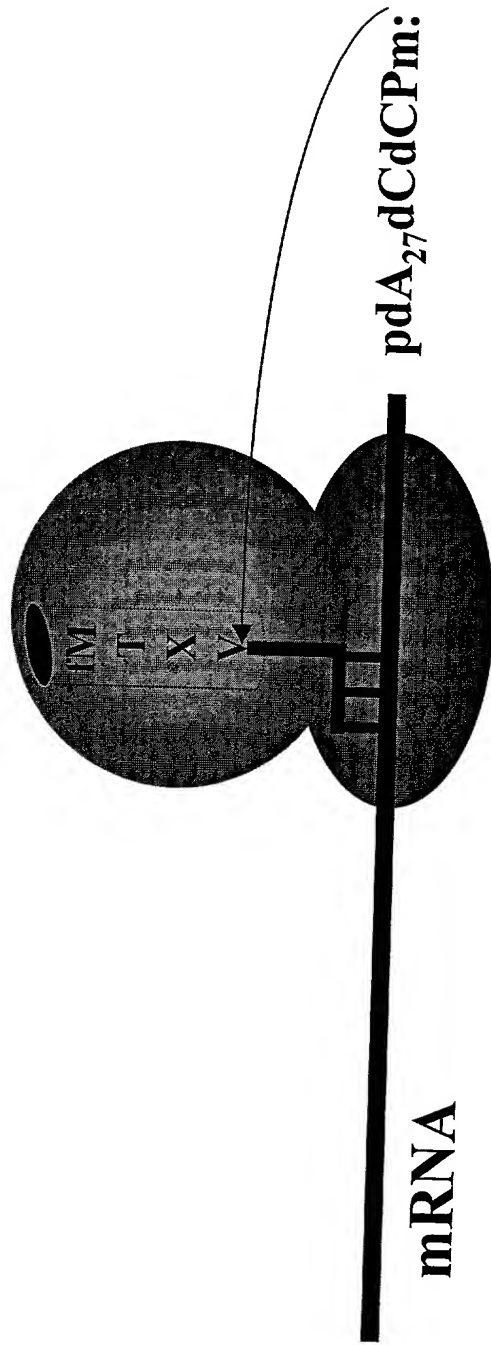
53 -mer

61-mer

101-ner

Fig. 19

Fig. 20

**Fig. 21**

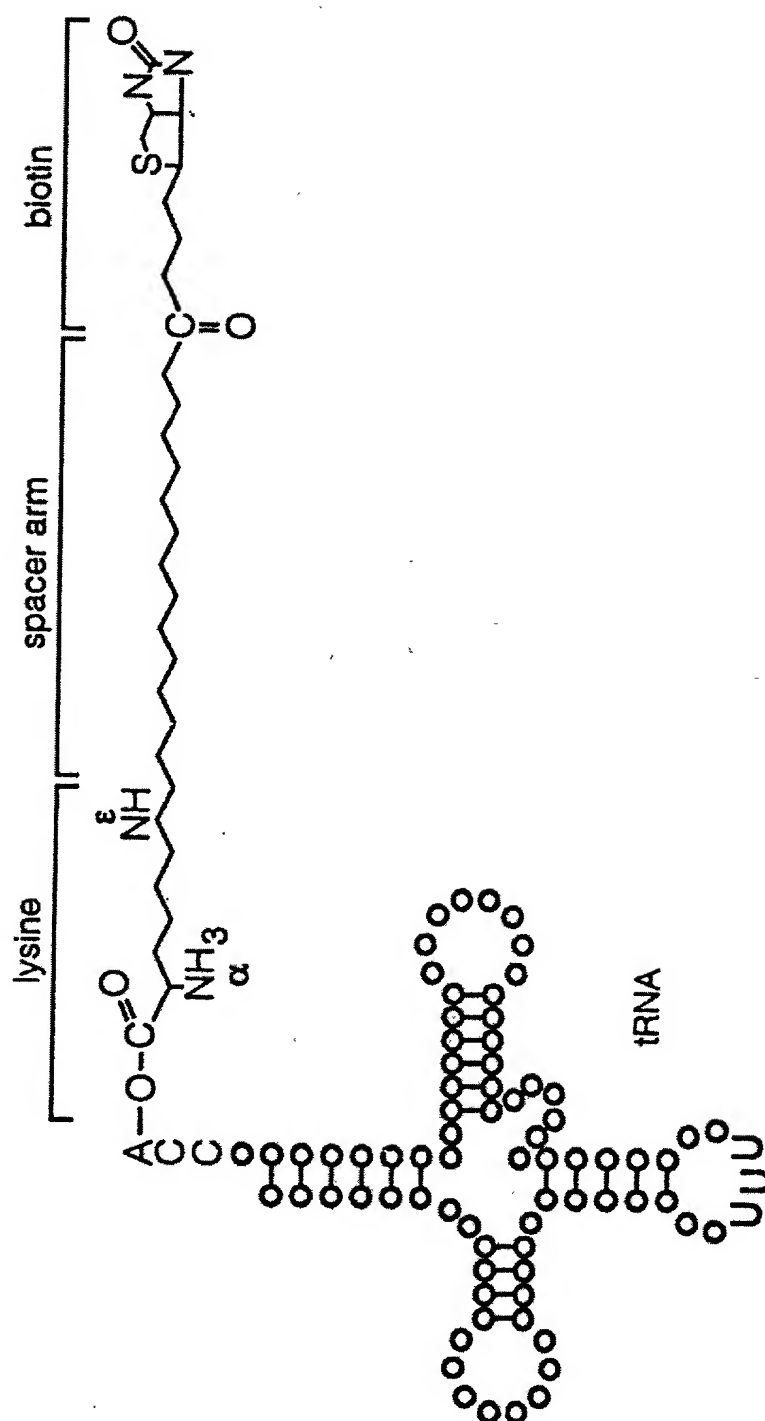


Fig. 22